

Exhibit No. T-7  
Tidewater Utilities, Inc.  
PSC Docket No. \_\_\_\_\_  
Witness: Dylan W. D'Ascendis  
Date Submitted:

BEFORE THE  
DELAWARE PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

DYLAN W. D'ASCENDIS, CRRA  
PRINCIPAL  
AUS CONSULTANTS

ON BEHALF OF

TIDEWATER UTILITIES, INC.

CONCERNING

CAPITAL STRUCTURE AND  
LONG-TERM DEBT COST RATE

NOVEMBER 2013

TABLE OF CONTENTS

Page No.

Introduction and Purpose ..... 1

Capital Structure Ratios ..... 2

Long-Term Debt Cost Rate..... 3

Appendix A – Professional Qualifications of Dylan W. D’Ascendis

1 **Introduction and Purpose**

2 **Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.**

3 A. My name is Dylan W. D'Ascendis. I am a Principal of AUS Consultants, a full-service  
4 utility consulting firm with expertise in all ratemaking disciplines. My business address  
5 is 155 Gaither Drive, Suite A, Mt. Laurel, New Jersey 08054.

6 **Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE AND**  
7 **EDUCATIONAL BACKGROUND.**

8 A. I offer expert testimony on behalf of investor-owned utilities on rate of return issues,  
9 including but not limited to common equity cost rate, fair rate of return, capital structure  
10 issues, credit quality issues, etc. I also assist in the preparation of rate filings, including  
11 but not limited to revenue requirements, rate design, class cost of service, original cost  
12 and lead/lag studies. I am a graduate of the University of Pennsylvania, where I received  
13 a Bachelor of Arts degree in Economic History. I have also received a Master of  
14 Business Administration with high honors and a concentration in finance and  
15 international business from Rutgers University. My full professional qualifications are  
16 provided in Appendix A.

17 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

18 A. The purpose is to provide testimony on behalf of Tidewater Utilities, Inc. (TUI or the  
19 Company) relative to the appropriate capital structure including the long-term debt cost  
20 rate to be used in calculating the overall rate of return. I have then incorporated the  
21 recommended common equity cost rate of Company Witness Pauline M. Ahern into our  
22 recommendation for the overall rate of return.

23 **Q. DO YOU HAVE AN EXHIBIT WHICH SUPPORTS YOUR DIRECT**

1           **TESTIMONY?**

2       A.     Yes, I do. It is Exhibit T-7 consisting of Schedules 1 through 4.

3       **Capital Structure Ratios**

4       **Q.     WHAT CAPITAL STRUCTURE RATIOS DO YOU RECOMMEND BE**  
5           **EMPLOYED IN DEVELOPING AN OVERALL FAIR RATE OF RETURN**  
6           **APPROPRIATE FOR THE COMPANY?**

7       A.     I recommend that TUI's capital structure ratios estimated at June 30, 2014 be adopted for  
8           ratemaking purposes to develop an overall rate of return applicable to the Company. The  
9           capital structure and related ratios I employ represent the capital structure which is  
10          expected to finance the Company's rate base. These ratios consist of 49.04% long-term  
11          debt and 50.96% common equity detailed on Schedule 2 and summarized on Schedule 1.

12      **Q.     ARE THE ESTIMATED CAPITAL STRUCTURE RATIOS AT JUNE 30, 2014**  
13           **APPROPRIATE FOR COST OF CAPITAL PURPOSES?**

14      A.     Yes, provided that the degree of financial risk contained in the estimated capital structure  
15           ratios is properly reflected in the allowed common equity cost rate. The Company's  
16           capital structure ratios estimated at June 30, 2014 are indicative of the ratios and  
17           embedded cost rate of fixed capital which the Company will experience in the near-term  
18           future, the period of time new rates are expected to be in effect. Since a utility has an  
19           obligation to serve all of the time, it is incumbent upon the utility to maintain capital  
20           structure ratios which should enable it to attract capital when required assuming a  
21           sufficient level of earnings.

22           TUI's estimated June 30, 2014 capital structure upon which its requested overall rate of  
23           return is based accomplishes this as it is accepted in the marketplace and is relatively

1 consistent with the capital structures maintained by other water utilities.

2 **Q. HOW DOES THE COMPANY'S RATEMAKING COMMON EQUITY RATIO**  
3 **OF 50.96% ESTIMATED AT JUNE 30, 2014 COMPARE WITH THE COMMON**  
4 **EQUITY RATIOS MAINTAINED BY THE COMPANIES IN THE PROXY**  
5 **GROUP?**

6 A. The Company's ratemaking common equity ratio of 50.96% estimated at June 30, 2014 is  
7 similar to the common equity ratios maintained on average by the companies in the proxy  
8 group of nine water companies. The common equity ratios of the nine water companies  
9 averaged 50.72% for the year 2012 and averaged 49.42% for the five years ended 2012 as  
10 shown on Schedule 3. Because the Company has no preferred stock outstanding, it is also  
11 appropriate to compare its ratemaking common equity ratio of 50.96% with the proxy  
12 group's average total equity ratio of 50.88% for the year 2012 (50.88% total equity =  
13 50.72% common equity and 0.16% preferred stock). Hence, a 50.96% common equity  
14 ratio is suitable for ratemaking purposes in determining overall rate of return for TUI.

15 **Q. WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S**  
16 **RATEMAKING CAPITAL STRUCTURE AND RELATED RATIOS?**

17 A. In view of the foregoing, it is my opinion that a capital structure based upon the  
18 Company's estimated capital structure at June 30, 2014 comprised of 49.04% long-term  
19 debt and 50.96% common equity contains similar financial risk relative to the capital  
20 structure ratios maintained by the companies in the proxy group. Therefore, the  
21 Company's estimated capital structure is appropriate for ratemaking purposes for TUI.

22 **Long-Term Debt Cost Rate**

23 **Q. WHAT COST RATE FOR LONG-TERM DEBT IS MOST APPROPRIATE FOR**

1           **USE IN A COST OF CAPITAL DETERMINATION FOR THE COMPANY?**

2    A.    A long-term debt cost rate of 6.01% estimated at June 30, 2014 is the most appropriate  
3           and is derived from the Company's estimated long-term debt expected to be outstanding  
4           at June 30, 2014. This cost rate is summarized on page 1 of Schedule 4.  
5           The CoBank loan and State Revolving Trust Note cost rates are determined by employing  
6           the cost rate to maturity method, i.e., yields to maturity, using as inputs the expected cash  
7           flows, comprised of fund draw-downs, interest and principal repayments and the net  
8           proceeds which reflect the necessary costs of each issuance. Once the cost rate to  
9           maturity, i.e., effective cost rate, is determined for each issue, a composite cost rate can  
10          be calculated based upon the total annualized long-term debt cost and total long-term debt  
11          outstanding.

12   **Q.    DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

13   A.    Yes.

APPENDIX A

PROFESSIONAL QUALIFICATIONS

OF

DYLAN W. D'ASCENDIS, CRRA  
PRINCIPAL

AUS CONSULTANTS



**PROFESSIONAL QUALIFICATIONS  
OF  
DYLAN W. D'ASCENDIS, CRRA  
PRINCIPAL  
AUS CONSULTANTS**

**PROFESSIONAL EXPERIENCE**

**2008-Present**

I prepare fair rate of return and cost of capital exhibits which are filed along with expert testimony before various state and federal public utility regulatory bodies. These supporting exhibits include the determination of an appropriate ratemaking capital structure and the development of embedded cost rates of senior capital. The exhibits also support the determination of a recommended return on common equity through the use of various market models, such as, but not limited to, Discounted Cash Flow analysis, Capital Asset Pricing Model and Risk Premium Methodology, as well as an assessment of the risk characteristics of the client utility. I also assist in the preparation of class cost of service, rate design, cash working capital, original cost and valuation studies. I prepare responses to interrogatories received regarding such testimonies filed on behalf of client utilities. Following the filing of fair rate of return testimonies, I evaluate opposition testimony in order to prepare interrogatory questions, areas of cross-examination, and rebuttal testimony. I also evaluate and assist in the preparation of briefs and exceptions following the hearing process.

I also evaluate the final orders and decisions of various commissions to determine whether further actions are warranted and to gain insight which may assist in the preparation of future rate of return studies.

In April 2011, I earned the Certified Rate of Return Analyst (CRRA) designation from the Society of Utility and Regulatory Financial Analysts (SURFA). This is based upon education, experience and the successful completion of a comprehensive examination.

As the Editor of AUS Utility Reports (formerly C. A. Turner Utility Reports), I am responsible for the data collection, distribution, marketing and billing of the AUS Monthly Utility Report, which provides comprehensive information on key ratios and industry rankings based upon financial statistics presented in the report for the electric, gas and water industries. I also assist in the calculation and production of the AGA Index, a market capitalization weighted index of the common stocks of the approximately 70 corporate members of the AGA.

I have filed testimony on cost of capital on behalf of the following:

Columbia Water Company  
Louisiana Water Service, Inc.  
Twin Lakes Utilities, Inc.

United Utility Services Company  
Utility Services of South Carolina, Inc.

I have filed testimony on capital structure on behalf of the following clients:

Middlesex Water Company  
Penn Estates Utilities, Inc.

Tega Cay Water Service, Inc.

I have assisted in the preparation of studies on behalf of the following clients:

The Regulatory Commission of Alaska  
City of Allentown, PA  
Alpena Power Company  
Anadarko Petroleum Corporation  
Apple Canyon Utility Company  
Applied Wastewater  
Aqua New Jersey, Inc.  
Aqua North Carolina, Inc.  
Aqua Ohio, Inc.  
Aquarion Water Company of Connecticut  
Aquarion Water Company of Massachusetts

Artesian Water Company  
The Atlantic City Sewerage Company  
Carolina Water Service of North Carolina  
Carolina Water Service of South Carolina  
The Columbia Water Company  
The Connecticut Water Company  
Corix Multi-Utility Inc.  
Delmarva Power and Light Company  
Equitable Gas Company  
Illinois American Water Company  
Interstate Power & Light Company



Iowa American Water Company  
Jersey Central Power & Light Company  
Lake Wildwood Utility Corporation  
Long Island American Water Company  
Massanutten Public Service Company  
Middlesex Water Company  
Missouri Gas Energy  
Missouri-American Water Company  
Mountaineer Gas Company  
New England Gas Company  
New Jersey-American Water Company  
The Newtown Artesian Water Company  
NRG Energy Center Harrisburg LLC  
Ohio-American Water Company  
Penn Estates Utilities  
Peoples Water Service Company of Bastrop  
Penn Estates Utilities Inc.  
Philadelphia Gas Works  
Piedmont Natural Gas Company  
Pinelands Water Company  
Pinelands Wastewater Company  
The Village of Plandome  
San Gabriel Water Company  
San Jose Water Company  
Southwest Gas Corporation  
Spring Creek Utilities, Inc.  
Suffolk County, NY  
Tega Cay Water Service, Inc.  
Tesoro Alaska Company  
Tidewater Utilities, Inc.

Trigen – Philadelphia Energy Corporation  
United Utility Companies  
United Water Arkansas, Inc.  
United Water Arlington Hills Sewerage, Inc.  
United Water Connecticut, Inc.  
United Water Delaware, Inc.  
United Water Great Gorge, Inc.  
United Water Idaho, Inc.  
United Water New Jersey, Inc.  
United Water New Rochelle, Inc.  
United Water New York, Inc.  
United Water Owego Nichols, Inc.  
United Water Pennsylvania, Inc.  
United Water Rhode Island, Inc.  
United Water Toms River, Inc.  
United Water Vernon Sewerage, Inc.  
United Water West Milford, Inc.  
United Water Westchester, Inc.  
Utilities Inc. of Central Nevada  
Utilities, Inc. of Florida  
Utilities, Inc. of Louisiana  
Utilities, Inc. of Nevada  
Utilities, Inc. of Pennsylvania  
Utilities, Inc. - Westgate  
Utility Center, Inc.  
Washington Gas Light Company  
Water Service Company of Indiana  
Water Services Corp. of Kentucky  
Wisconsin Power and Light Company

#### EDUCATION:

University of Pennsylvania – B.A. –Economic History  
Rutgers University – M.B.A. – Cum Laude (Concentration: Finance and International Business, including an independent study on public utility ratemaking)  
New Mexico State University – Practical Training for the Electric Industry

#### PROFESSIONAL AFFILIATIONS:

Society of Utility and Regulatory Financial Analysts  
National Association of Water Companies

#### SPEAKING ENGAGEMENTS:

“Regulatory Training in Financing, Planning, Strategies and Accounting Issues for Publicly- and Privately-Owned Water and Wastewater Utilities”, New Mexico State University Center for Public Utilities, October 13-18, 2013, Instructor.

“Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks”, before the Society of Utility and Regulatory Financial Analysts: 45<sup>th</sup> Financial Forum, April 17-18, 2013, Indianapolis, IN.

“Application of a New Risk Premium Model for Estimating the Cost of Common Equity”, Co-Presenter with Pauline M. Ahern, CRRA, AUS Consultants, Edison Electric Institute Cost of Capital Working Group, October 3, 2012, Webinar.

“Application of a New Risk Premium Model for Estimating the Cost of Common Equity”, Co-Presenter with Pauline M. Ahern, CRRA, AUS Consultants, Staff Subcommittee on Accounting and Finance of the National Association of Regulatory Commissioners, September 10, 2012, St. Paul, MN.

Chair – “Cost of Capital” - Advanced Workshop in Regulation and Competition, 31<sup>st</sup> Annual Eastern Conference of the Center for Research in Regulated Industries (CRRRI), May 18, 2012, Rutgers University, Shawnee on Delaware, PA.

PAPERS:

“Comparative Evaluation of the Predictive Risk Premium Model<sup>TM</sup>, the Discounted Cash Flow Model and the Capital Asset Pricing Model”, co-authored with Pauline M. Ahern, CRRRI, Richard A. Michelfelder, Ph.D. of Rutgers University and Frank J. Hanley, The Electricity Journal, May 2013.

“A New Approach for Estimating the Equity Risk Premium for Public Utilities”, co-authored by Pauline M. Ahern, Frank J. Hanley and Richard A. Michelfelder, Ph.D., Rutgers University, The Journal of Regulatory Economics (December 2011), 40:261-278. (Research Assistant).

Exhibit No. T-7  
Tidewater Utilities, Inc.  
PSC Docket No. \_\_\_\_\_  
Witness: Dylan W. D'Ascendis  
Date Submitted:

BEFORE THE  
DELAWARE PUBLIC SERVICE COMMISSION

EXHIBIT  
TO ACCOMPANY THE  
PREPARED DIRECT TESTIMONY

OF  
DYLAN W. D'ASCENDIS, CRRA  
PRINCIPAL  
AUS CONSULTANTS

ON BEHALF OF  
TIDEWATER UTILITIES, INC.

NOVEMBER 2013

Table of Contents  
to Exhibit No. T-7  
of Dylan W. D'Ascendis, CRRA

	<u>Schedule</u>
Summary of Cost of Capital and Fair Rate of Return	1
Capital Structure of Tidewater Utilities, Inc. Actual at September 30, 2013 and Estimated at June 30, 2014	2
Capital Structure of Ms. Ahern's Nine Water Companies	3
Calculation of the Composite Cost Rate of Long-Term Debt	4

Tidewater Utilities, Inc.  
Summary of Cost of Capital and Fair Rate of Return  
Based upon its Estimated Capital Structure at June 30, 2014

<u>Type of Capital</u>	<u>Ratios (1)</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	49.04%	6.01% (2)	2.95%
Common Equity	<u>50.96%</u>	10.95% (3)	<u>5.58%</u>
Total	<u>100.00%</u>		<u>8.53%</u>

Notes:

(1) From Schedule 2.

(2) From Schedule 4.

(3) From Exhibit No. T-6, Schedule 1.

Tidewater Utilities, Inc.  
Capitalization and Capital Structure Ratios  
for Tidewater Utilities, Inc.  
Based Upon Investor-Provided Capital  
Actual at September 30, 2013 and Estimated at June 30, 2014

Line No.	Capitalization	September 30, 2013			June 30, 2014		
		(Actual)		Amount Outstanding (1)	(Estimated)		Ratios Incl. S-T Debt
		Excl. S-T Debt	Incl. S-T Debt		Excl. S-T Debt	Incl. S-T Debt	
1	Long-Term Debt						
2	8.05% CoBank Secured Note	\$ 2,047,251		\$ 1,917,242			
3	6.25% CoBank Secured Note	6,160,000		5,845,000			
4	6.44% CoBank Secured Note	4,736,667		4,526,667			
5	6.46% CoBank Secured Note	5,016,667		4,806,667			
6	6.59% CoBank Secured Note	5,435,467		5,173,867			
7	7.05% CoBank Secured Note	4,083,333		3,895,834			
8	5.69% CoBank Secured Note	8,376,068		7,991,453			
9	Expected 5.75% CoBank Secured Note	-		12,000,000			
10	4.22% State Revolving Trust Note	485,864		443,314			
11	3.60% State Revolving Trust Note	2,746,047		2,559,404			
12	3.30% State Revolving Trust Note	541,428		523,756			
13	4.03% State Revolving Trust Note	763,352		719,812			
14	3.49% State Revolving Trust Note	569,356		552,667			
15	3.64% State Revolving Trust Note	339,022		321,676			
16	3.64% State Revolving Trust Note	112,888		106,854			
17	3.45% State Revolving Trust Note	409,689		966,431			
18	3.75% State Revolving Trust Note	2,565,393		2,463,365			
19	Notes Payable to Associated Company	1,375,000		-			
20	Total Long-Term Debt	\$ 45,763,492	44.55 %	\$ 54,814,009	49.04 %	49.04 %	
21	Common Equity	56,961,119	55.45	56,961,119	50.96	50.96	
22	Total Permanent Capital	\$ 102,724,611	100.00 %	\$ 111,775,128	100.00 %	100.00 %	
23	Short-Term Debt CoBank Line of Credit	8,450,000	7.60	-	-	-	
24	Total Capital Employed	\$ 111,174,611	100.00 %	\$ 111,775,128	100.00 %	100.00 %	

Notes: (1) Company-provided.



Capital Structure Based upon Total Permanent Capital for the  
Proxy Group of Nine Water Companies  
2008 - 2012, Inclusive

	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>5 YEAR AVERAGE</u>
<u>American States Water Co.</u>						
Long-Term Debt	42.49 %	45.46 %	44.30 %	46.95 %	46.25 %	45.09 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	57.51	54.54	55.70	53.05	53.75	54.91
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>American Water Works Co., Inc.</u>						
Long-Term Debt	54.30 %	55.72 %	56.73 %	56.98 %	53.75 %	55.49 %
Preferred Stock	0.21	0.27	0.29	0.30	0.32	0.28
Common Equity	45.49	44.01	42.98	42.72	45.93	44.23
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Aqua America, Inc.</u>						
Long-Term Debt	53.41 %	54.11 %	57.05 %	56.59 %	54.21 %	55.08 %
Preferred Stock	0.01	0.02	0.02	0.02	0.09	0.03
Common Equity	46.58	45.87	42.93	43.39	45.70	44.89
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Artesian Resources Corp.</u>						
Long-Term Debt	47.60 %	48.93 %	52.84 %	54.12 %	59.57 %	52.61 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	52.40	51.07	47.16	45.88	40.43	47.39
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>California Water Service Group</u>						
Long-Term Debt	50.39 %	52.04 %	52.51 %	47.93 %	41.88 %	48.95 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	49.61	47.96	47.49	52.07	58.12	51.05
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Connecticut Water Service, Inc.</u>						
Long-Term Debt	49.03 %	53.05 %	49.32 %	50.59 %	46.94 %	49.79 %
Preferred Stock	0.21	0.30	0.34	0.35	0.39	0.32
Common Equity	50.76	46.65	50.34	49.06	52.67	49.89
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Middlesex Water Company</u>						
Long-Term Debt	43.53 %	43.12 %	43.91 %	47.35 %	49.10 %	45.40 %
Preferred Stock	1.02	1.06	1.07	1.24	1.22	1.12
Common Equity	55.45	55.82	55.02	51.41	49.68	53.48
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>SJW Corporation</u>						
Long-Term Debt	55.39 %	56.63 %	53.79 %	49.52 %	46.08 %	52.28 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	44.61	43.37	46.21	50.48	53.92	47.72
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>York Water Company</u>						
Long-Term Debt	45.98 %	47.16 %	48.28 %	47.16 %	55.31 %	48.78 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	54.02	52.84	51.72	52.84	44.69	51.22
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Proxy Group of Nine Water Companies</u>						
Long-Term Debt	49.12 %	50.69 %	50.97 %	50.80 %	50.35 %	50.39 %
Preferred Stock	0.16	0.18	0.19	0.21	0.22	0.19
Common Equity	50.72	49.13	48.84	48.99	49.43	49.42
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>

Source of Information  
EDGAR Online's I-Metrix Database  
Annual Forms 10-K

Tidewater Utilities, Inc.  
Calculation of the Composite Cost Rate of Outstanding Long-Term Debt

Actual at September 30, 2013

Series	Amount Outstanding (1)	Effective Cost Rate (2)	Annualized Cost	Composite Interest Rate
8.05% CoBank Secured Note	\$ 2,047,251	8.25 %	\$ 168,957	
6.25% CoBank Secured Note	6,160,000	6.43	396,087	
6.44% CoBank Secured Note	4,736,667	6.57	311,370	
6.46% CoBank Secured Note	5,016,667	6.62	331,947	
6.59% CoBank Secured Note	5,435,467	6.70	364,370	
7.05% CoBank Secured Note	4,083,333	7.21	294,270	
5.69% CoBank Secured Note	8,376,068	5.76	482,879	
4.22% State Revolving Trust Note	485,864	5.22	25,347	
3.60% State Revolving Trust Note	2,746,047	4.12	113,146	
3.30% State Revolving Trust Note	541,428	3.75	20,279	
4.03% State Revolving Trust Note	763,352	4.32	32,962	
3.49% State Revolving Trust Note	569,356	3.94	22,454	
3.64% State Revolving Trust Note	339,022	4.64	15,724	
3.64% State Revolving Trust Note	112,888	4.19	4,727	
3.45% State Revolving Trust Note	409,689	3.96	16,244	
3.75% State Revolving Trust Note	2,565,393	3.75	96,202	
Notes Payable to Associated Company	1,375,000	7.00 (1)	96,250	
Total Long-Term Debt	<u>\$ 45,763,492</u>		<u>\$ 2,793,215</u>	<u>6.10 %</u>

Estimated at June 30, 2014

Series	Amount Outstanding (1)	Effective Cost Rate (2)	Annualized Cost	Composite Interest Rate
8.05% CoBank Secured Note	\$ 1,917,242	8.25 %	\$ 158,228	
6.25% CoBank Secured Note	5,845,000	6.43	375,832	
6.44% CoBank Secured Note	4,526,667	6.57	297,566	
6.46% CoBank Secured Note	4,806,667	6.62	318,051	
6.59% CoBank Secured Note	5,173,867	6.70	346,833	
7.05% CoBank Secured Note	3,895,834	7.21	280,757	
5.69% CoBank Secured Note	7,991,453	5.76	460,706	
Expected 5.75% CoBank Secured Note	12,000,000	5.91	709,054	
4.22% State Revolving Trust Note	443,314	5.22	23,127	
3.60% State Revolving Trust Note	2,559,404	4.12	105,455	
3.30% State Revolving Trust Note	523,756	3.75	19,617	
4.03% State Revolving Trust Note	719,812	4.32	31,082	
3.49% State Revolving Trust Note	552,667	3.94	21,796	
3.64% State Revolving Trust Note	321,676	4.64	14,919	
3.64% State Revolving Trust Note	106,854	4.19	4,474	
3.45% State Revolving Trust Note	966,431	3.71	35,855	
3.75% State Revolving Trust Note	2,463,365	3.75	92,376	
Notes Payable to Associated Company	-	7.00 (1)	-	
Total Long-Term Debt	<u>\$ 54,814,009</u>		<u>\$ 3,295,728</u>	<u>6.01 %</u>

Notes: (1) Company-provided.  
(2) As developed on page 2 of this Schedule.

Source of Information: Company-provided data

Tidewater Utilities, Inc.  
Calculation of the Effective Cost Rate of Long-Term Debt by Series for  
Tidewater Utilities, Inc.

Series	Nominal Date of Issue	Date of Maturity	Principal Amount Issued	Issuance Expenses	Net Proceeds	Net Proceeds Ratio	Effective Cost Rate to Maturity (1)
8.05% CoBank Secured Note	10/27/1995	12/20/2021	\$ 3,500,000	\$ 45,970	\$ 3,454,030	98.69 %	8.25 %
6.25% CoBank Secured Note	5/22/2003	5/22/2028	10,500,000	141,333	10,358,667	98.65	6.43
6.44% CoBank Secured Note	8/31/2005	8/25/2030	7,000,000	59,829	6,940,171	99.15	6.57
6.46% CoBank Secured Note	9/30/2005	9/19/2031	7,000,000	59,829	6,940,171	99.15	6.62
6.59% CoBank Secured Note	3/19/2009	4/20/2029	6,976,000	44,685	6,931,315	99.36	6.70
7.05% CoBank Secured Note	6/1/2009	1/20/2030	5,000,000	44,685	4,955,315	99.11	7.21
5.69% CoBank Secured Note	3/8/2010	1/20/2030	10,000,000	44,685	9,955,315	99.55	5.76
Expected 5.75% CoBank Secured Note	4/1/2014	3/31/2034	12,000,000	150,000	11,850,000	98.75	5.91
4.22% State Revolving Trust Note	7/30/2002	12/31/2022	784,000	50,457	733,543	93.56	5.22
3.60% State Revolving Trust Note	7/18/2003	5/1/2025	3,274,418	30,857	3,243,561	99.06	4.12
3.30% State Revolving Trust Note	8/27/2004	3/1/2026	882,535	30,857	851,678	96.50	3.75
4.03% State Revolving Trust Note	10/17/2006	12/1/2026	993,000	21,384	971,616	97.85	4.32
3.49% State Revolving Trust Note	11/9/2005	1/25/2027	2,000,000	29,235	1,970,765	98.54	3.94
3.64% State Revolving Trust Note	3/24/2008	1/1/2028	140,000	11,862	128,138	91.53	4.64
3.64% State Revolving Trust Note	6/2/2008	7/1/2028	940,000	11,862	928,138	98.74	4.19
3.45% State Revolving Trust Note	12/29/2010	8/1/2031	1,114,800	2,408	1,112,392	99.78	3.96
3.75% State Revolving Trust Note	6/2/2011	7/1/2031	2,785,740	3,625	2,782,115	99.87	3.75

Notes: (1) Determined by taking into account the effect of interest payments as well as principal repayments.

Source of Information: Company-provided data